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(RESEARCH ARTICLE)



Suicide among Iranians doctors

Elnaz Ghaffari 1, 2, 3, *

- ¹ Ph.D., Spaceborn United company, Eindhoven, Netherlands.
- ² Iran University of Medical Sciences, Tehran, Iran.
- ³ Preventative Gynecology Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

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Abstract

Background: All nations are affected by the global issues of doctor suicide and depression. Of course, the COVID-19 pandemic's effects have to be taken into account as well.

Aims: This article was written because this subject is significant on a worldwide scale. In this area, Iran lacks both accurate official statistics and scientific research. This article can be viewed as a significant starting step.

Methods: Data was gathered by looking through all of the trustworthy Iranian media that covered the suicides of doctors between February 2020 and February 2023.

Results: Iranian doctors who took their own lives tended to be young, female, residents, and specialists. The majority of doctors took drugs to end their life.

Conclusion: Iranian doctors' suicide rates and the rise in the number of unexpected fatalities among doctors, particularly among young medical residents, are concerning. Therefore, there is a critical need for additional study, management, and preventative measures

Keywords: Suicide; Doctors suicide; Mental health; Iranian doctors; Work stress

1. Introduction

Suicide, a complex public health problem, is the leading cause of death worldwide (1). Doctors all over the world; work under stressful conditions and often make life-or-death decisions under considerable pressure. For several decades, research has shown that the rate of psychiatric disorders, especially suicide, is significantly higher in physicians than in the general population (2). Depression is a common mental disorder. Depression among physicians can lead to poor individual and organizational outcomes. People with depression are twice as likely to die prematurely from any cause and have an increased risk of suicide. Doctors experience higher rates of depression and suicide than the general population. Having depression in doctors; can have massive impacts on their well-being and work performance. Depression; has associated with an increase in medical errors, a decrease in the ability to manage work-related stress, an increase in absenteeism, interruption of medical education, disruption in personal life, suicide, and low quality of life (3). Depression; and suicide of doctors is a global problem, and almost all countries are facing it. The Chinese Medical Association reported that 16 doctors committed suicide from 2004 to 2014, most of them young (4). Studies have shown that Chinese doctors have more depression than the general population. The prevalence of depressive symptoms in China averages 39%, while the prevalence among physicians 'averages about 47% (5,6,7). A Russian doctor wrote about the high rate of suicide among his classmates; 10% of them died at their own hands (8). The risk of depression and

^{*} Corresponding author: Elnaz Ghaffari

suicide has increased among Australian doctors (9). In addition, the results show alarmingly high rates of burnout and psychiatric complications among British doctors (10). of course, the effect of the COVID-19 pandemic; must be considered in this issue. The COVID-19 pandemic has increased interest in how to protect and optimize physician mental health. Physicians are not immune to mental illness, with a quarter and a third reporting a rise in mental illness symptoms. Doctors, especially female doctors, are at increased risk of suicide (11). Therefore, I did this research due to the importance of this issue at the global level and the increase in the number of deaths of doctors, especially young medical residents in Iran, a significant part of which were suicides that were never officially announced. It is necessary to mention; there are no scientific articles and reviews in this field in Iran.

2. Material and methods

After confirmation from the ethics committee that according to the WHO (World Health Organization) statement: when there is no possibility of harm arising because of the conduct of the research project or when the information collected is available from the public, proposals are exempt from ERC (Research Ethics Review Committee) review (12); so, all the reliable Iranian public media (any platforms) that had reported Doctors suicide with justice and acceptable evidence and unbiased from February 2020 to February 2023 used. The keywords used were Suicide, Doctor, and Resident. According to ethics, compliance with the confidentiality of about name of the individual doctor and the specific institution or workplace of the individual. In this article, no private information; was not disclosed, and; no person did not judge. No charges; were brought against any person or organization.

3. Results

In searching all the reliable Iranian media (any platforms) that had reported Doctors' suicide with justice and acceptable evidence and unbiased, only seven suicides, were Confirmed and announced. According to observations, the number of Iranian doctors' suicides is more than this amount, but there is no source, reference, or accurate and official information about. 6 (85.7%) were female doctors, and 1 (14.3%) was male doctor [Figure 1]. Age ranged from 21 to 42 years, and mean age was 32.4 years [Figure 1]. among February 2020 and February 2023, Among the seven confirmed and announced suicides, two occurred in July 2021, two occurred in October 2021, one occurred in February 2022, and two occurred in June 2022 [Figure 2], 4 of them (57.1%) occurred in Tehran and 3 (42.9%) occurred in other Iran's cities [Figure 2]. One (14.3%) was an Intern, one (14.3%) was a General Practitioner, three (42.9%) were Residents, and two people (28.6%) were Specialist doctors [Figure 1]. The fields of the medical specialty of them were two (28.6%) obstetrics and gynecology, one (14.3%) internal medicine, and one (14.3%) psychiatry [Figure 1]. Methods of suicides, 3 (42.9%) used medications (oral and injection), 1 (14.3%) jumped from a building to end life, and 4 (42.9%) never were announced [Figure 2]. The cause of suicides was work problems in two cases (28.6%), in two (28.6%) family problems, and the cause of suicide in three (42.9%) was never announced [Figure 2].

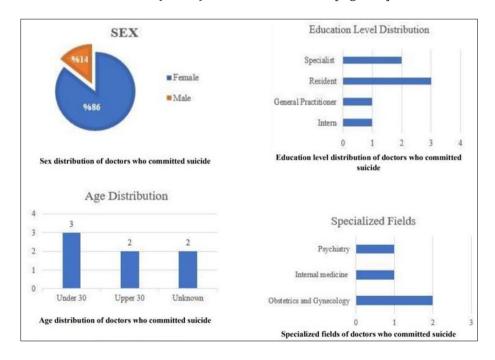


Figure 1 Sex, age, level, field

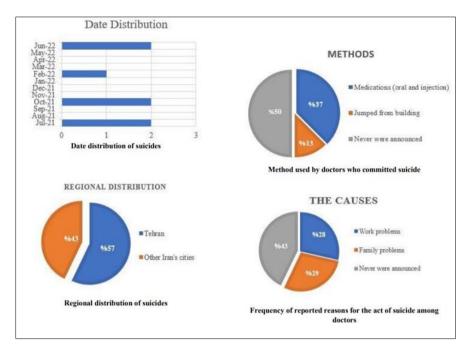


Figure 2 Date, methods, regional, cause

4. Discussion

The main risk factors for depression and suicide in doctors are work stress and burnout. The medical profession has its inherent physical and mental injuries. Medicine career includes a set of additional risk factors related to suicide (13). Current risk factors related to suicidal thoughts of doctors; are prevalent stressors that consist: of personal, financial, health, and occupational problems (14). Significant workload, night shifts, high levels of job burnout, low levels of job satisfaction and hopelessness about the future in medicine, long working hours, fatigue and compassion, stress and anxiety caused by clinical work, pressure of promotion of job title, workplace culture, Bullying and discrimination and access to dangerous devices, organizational and systemic erosive policies, imposing contracts with high hardship and low benefits, tension between doctors and patients, which are significant factors in causing mental health problems and suicidal thoughts in doctors, may be caused by external influences from work, such as family problems, poor support, work-life imbalance, high level of responsibility and fear of doing wrong, some personality and cognitive characteristics such as conscientiousness, commitment and obsession, perfectionism, inflexibility, over-commitment, self-criticism and inability in peace, which is more common among physicians and is strongly associated with increased risk of suicide (4,15-19), factors such as weak physical health, physical and mental illnesses, and unpleasant childhood are associated with depression in physicians. The principal psychiatric diagnoses among doctors who commit suicide are emotional disorders with depression or bipolar illness (4). Physicians consistently avoid seeking help because of the stigma against mental illness, the stigma against themselves, and growing concerns that disclosure may affect their medical license. Physicians choose to self-medicate with prescription drugs, alcohol, and other substances in numerous cases (2). There is a strong correlation between depression and alcoholism, smoking, and job dissatisfaction. Sleep deprivation, gender, social support, and marital status were in some studies showing relationships and others not. Physicians have high rates of undiagnosed depression and high levels of depressive symptoms and suicidal ideation. Studies have shown that the choice of specialty may affect the risk of depression (3,5,20-22). in the last four years, the sudden death of doctors, especially young medical residents, has increased in Iran. And the reason for a significant number of them, although never announced, was suicide. In our study, most physicians who committed suicide were 42.9% medical residents and 28.6% specialists (71.5%) [Figure 1,2]. The vulnerability of medical students may vary by specialty: for example, physicians working in mental health, emergency medicine, and oncology report being highly stressed due to a lack of resources, while those in Rural/remote/indigenous health sector workers and pediatricians report being stressed extremely (23, 24), in our study, the specialty of doctors who committed suicide was 28.6% obstetrics and gynecology, 14.3% internal medicine and 14.3% psychiatry [Figure 1,2]. There is considerable research that shows that female doctors comparing them are at higher risk of suicide than their male counterparts. The rate of suicide attempts and suicidal thoughts is significantly higher among female doctors. Medical students, young doctors, and women are at the highest risk of suicide (19). A 2013 study of Australian doctors showed that younger doctors and women reported higher rates of psychological distress and mental health problems than men and older doctors (9); These results are consistent with the results of our investigation. In our study, most doctors were female (85.7%) and under 30 years old [Figure 1,2]. Drug poisoning is the most common method of suicide used by doctors. It is consistent with our study's

result. It is necessary to mention that hanging is the most common method of suicide in the general population (19). In our study, most physicians used drugs (injection and oral) for suicide [Figure 1,2]. Also, the role of the Covid-19 epidemic, which has caused various psychological problems, including panic disorder, anxiety, depression (25-27), and double work pressure on doctors, cannot be ignored.

5. Conclusion

Suicide among Iranian doctors and the increase in the number of sudden deaths of doctors, especially young medical residents, in Iran, are a concern. The majority are young, female, medical residents, and specialists. Most doctors used medications (oral and injections) to end their lives. As a result, there is an urgent need for more research, preventive strategies, and management.

Compliance with ethical standards

Acknowledgments

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Disclosure of conflict of interest

There are no conflicts of interest.

Statement of informed consent

The ethics committee confirmation that according to the **WHO (World Health Organization)** statement: **when there is no possibility of harm** arising because of the conduct of the research project or when the information collected is **available from the public**, proposals are exempt from **ERC (Research Ethics Review Committee)** review (12). According to ethics, compliance with the confidentiality of about name of the individual doctor and the specific institution or workplace of the individual. In this article, no private information; was not disclosed, and; no person did not judge. No charges; were brought against any person or organization.

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